

We Claim:

1. A method of coding an image sequence, said method comprising the steps of:

a) prior to performing said coding, testing whether or not an actual image of a video image sequence has reached or exceeded a predetermined capacity parameter for a capacity of an encoder performing the coding of the image sequence; and

b) performing a reduction of a coding format used in the coding so as to reduce resolution for a portion of the image sequence coded and coding said actual image with said coding format after said reduction when said capacity parameter has been reached or exceeded.

2. A method of decoding an image sequence, said method comprising the steps of:

a) after or during said decoding of an actual image, testing whether or not said actual image was subjected to reduction of a coding format for said actual image; and

b) performing a large-scale interpolation of the coding format for said actual image when said actual image was subjected to said reduction of said coding format.

3. The method as defined in claim 1, wherein said encoder (3) is provided with a bit stream buffer (2) and said predetermined capacity parameter is at least one of a buffer filling state of said bit stream buffer (2) and a quantization parameter for the coding.

4. The method as defined in claim 1, wherein said encoder (3) is provided with a bit stream buffer (2) and said predetermined capacity parameter is a transformation coefficient for the coding.

5. The method as defined in claim 1, wherein the reduction of the coding format comprises an adaptive sub-scanning with low-pass filtering of said actual image under control of said predetermined capacity parameter.

6. The method as defined in claim 5, further comprising a syntactic restarting of said coding after changing said coding format.

7. The method as defined in claim 6, wherein said encoder is an MPEG-4 encoder and further comprising interrupting an actual video object layer, writing a new video object header and initializing a new video object layer with an INTRA-coded image in a new coded format when said coding format changes.

8. The method as defined in claim 3, further comprising, prior to processing a following image for regulation of the buffer filling state, registering a required bit

quantity for the coding of the actual image and adding the required bit quantity to the filling state of the bit stream buffer after subtracting an average bit quantity.

9. The method as defined in claim 8, further comprising looping back to a previous coding format with full resolution when the filling state of the bit stream buffer (2) moves under a predetermined limiting value after reduction of said coding format.

10. The method as defined in claim 1, further comprising raising said resolution by a plurality of resolution stages after said reduction of said resolution.

11. The method as defined in claim 10, further comprising a hysteresis mechanism for limiting coding format changes during the coding.

12. The method as defined in claim 10, wherein said encoder has a bit stream buffer and further comprising a hysteresis mechanism comprising limiting coding format changes to a minimum number for said images during said coding, independently of a filling state of said bit stream buffer.

13. The method as defined in claim 5, wherein said sub-scanning with said low-pass filter is performed at least in a horizontal direction.

14. The method as defined in claim 2, further comprising calling upon information for testing whether or not said actual image has been subjected to said reduction of said coding format and wherein said information is available to said decoder and is transmitted as system information.

15. The method as defined in claim 14, wherein said system information is scene composition information when said coding occurs according to a MPEG-4 standard.

16. The method as defined in claim 2, further comprising amplification of every reduced code format for said image sequence prior to reproduction on a decoder-side display device.

17. A coding device for coding an image sequence, said coding device comprising

an encoder (3) for preparing compressed image data from the image sequence;

a resolution controller (8) for the encoder (3), said resolution controller comprising means for reduction of a coding format used by the encoder to prepare the compressed image data; and

a switching device (4) for connecting or disconnecting the resolution controller (8) with the encoder according to a capacity parameter given by the

encoder (3), whereby the coding format is reduced or not respectively by the resolution controller (8).

18. The coding device as defined in claim 17, wherein the switching device (4) includes means for generating a control signal (9) for the encoder (3) for halting the coding, changing the coding format and restarting the coding with a changed coding format.

19. The coding device as defined in claim 18, wherein said changed coding format produces an INTRA-coded image.

20. A decoding device for decoding an image sequence, said decoding device comprising

- a decoder (10) for preparing a series of images from compressed image data; and

- a code format changing device (14) for images of said series of said images that must be decoded from portions of said compressed image data that were coded with a reduced code format.

21. The decoding device as defined in claim 20, further comprising a switching device (13) for connecting said code format changing device (14) with said decoder (10) according to information regarding at least one of said reduced code format and system information.

22. The decoding device as defined in claim 21, wherein said code format changing device (14) includes means for performing an image point interpolation for said images of said series of said images that must be decoded from portions of said compressed image data whose image information was thinned.